



Land North of Carisbrook Road, Mitcheldean

Mineral Resource Assessment

Gladman Developments Ltd

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Basis of Report

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Executive Summary

This Mineral Resource Assessment (MRA) report has been prepared to support a proposed residential development on Land North of Carisbrook Road, Mitcheldean, Gloucestershire.

The site comprises 9.72 ha of agricultural land, surrounded by industrial and residential properties to the east, south and west. The site is located in a Mineral Safeguarding Area and a Mineral Consultation Area for Sandstone and Limestone.

The safeguarded mineral in question is the Brownstones Formation - interbedded sandstones and silt/mudstone. Geological information sources include BGS geological maps, offsite boreholes and records of local exposures within Mitcheldean. The Brownstones Formation is recognised primarily as a source of natural building stone but is durable enough to be used as a potential construction aggregate. Locally, it is extracted from the nearby Wilderness Quarry as natural building stone, armour stone and bulk fill.

The proposed non-mineral development must meet one of the compliance requirements under *Policy MS01* of the adopted Gloucestershire Minerals Local Plan. We have assessed the Brownstones Formation at the site in the context of both an aggregate mineral and a natural building stone. Conceptual quarry design principles have been applied to the site, and once buffers to Environmentally Sensitive Receptors have been applied, the residual area of mineral available is considered too small for a viable extraction operation. Additionally, it is likely that blasting would be required to extract the stone, which would increase the buffers required from existing housing and industrial property.

Overall, from an aggregate extraction perspective, the site is considered to be too small to be economically viable as a stand-alone operation. For use as a building stone, the assessment concludes that the proximity to surrounding environmental sensitive receptors reduces the workable area to such an extent that the residual potential mineral would be too small to be commercially viable. The proposed development is therefore compatible with mineral safeguarding policy *MS01* point three where '*the mineral resources of concern are not economically valuable*'.

Research shows that there is low output and demand for this stone locally. As extraction of the Brownstones Formation from the Wilderness Quarry occurs intermittently, this will be likely to continue beyond 2042. Any application for prior extraction of the building stone would not be able to demonstrate a demand for this mineral under *Policy MW02 | Natural building stone*, as this can be met from the Wilderness Quarry.

Drawing all of these points together, the proposed non-minerals development is compliant with *Policy MS01* of the adopted Gloucestershire Minerals local Plan.



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Appendix A	BGS borehole SO62SE10
Appendix B	Gloucestershire MLP Policies MS01 and MW02

Drawings

	Scale
001 Site Location Plan	1:10,000
002 Bedrock Geology with Site Constraints	1:10,000



1.0 Introduction

- 1.1 This report has been prepared in accordance with instructions from Gladman Developments Ltd, to prepare a Mineral Resource Assessment (MRA) in support of planning application ref. P0672/25/OUT for residential development on Land North of Carisbrook Road, Mitcheldean, Forest of Dean, Gloucestershire.
- 1.2 The proposed development comprises up to 180 dwellings, with associated roadways, infrastructure and public open space and tree planting. Sustainable drainage features (SuDS) have been proposed for the areas of lowest elevation to the south.
- 1.3 Following the outline application submission, the Mineral Planning Authority (MPA), Gloucestershire County Council, have requested a Mineral Resource Assessment (MRA) for the site. The proposed development site is located in a Mineral Safeguarding Area (MSA) and a Mineral Consultation Area (MCA) for Sandstone and Limestone. This MRA report will assess the site-specific geology, and the relevant mineral safeguarding policies in the context of the proposed development.

2.0 Site Setting

Site Location

- 2.1 The site is located on the northern edge of Mitcheldean and comprises approximately 9.72 ha of agricultural land. It is bounded by Bradley Close Road to the east with industrial units beyond, Carisbrook Road to the south and Ross Road to the west with residential properties beyond as shown on Drawing 001. Agricultural land is located immediately to the north. The lowest points of elevation on the site are located towards the south, at 137m AOD. OS contours indicate that elevation gradually increases to the north, reaching 160m AOD at the northern boundary.

Geology

- 2.2 Geologically, a distinction is made between “Superficial Deposits” and “Bedrock Geology”. Superficial deposits are generally unconsolidated deposits (such as sand and gravel) which are found at, or close to, the surface. The solid bedrock beneath the superficial deposits is referred to as the “Bedrock Geology”.

Superficial Deposits



- 2.3 British Geological Survey (BGS) maps show that there are no superficial deposits on the site.

Bedrock Geology

- 2.4 BGS maps show that the Devonian Brownstones Formation, comprising interbedded sandstones and argillaceous rocks (fine grained sedimentary rocks such as mudstones) underlies the site. Whilst the MSA is identified to be for Sandstones and Limestones, the safeguarded mineral beneath the site is the Brownstones Formation.
- 2.5 The lithology is described as '*red, brown and purple fluvial sandstones with red mudstone interbeds*'. The Brownstones Formation is mapped extensively throughout Gloucestershire, Herefordshire and South Wales; Formation thicknesses are variable depending on the region. The BGS reports that the Formation thicknesses can be up to 1200m. Local outcrops within Mitcheldean show beds of the Brownstones Formation dipping 30° westwards¹. The bedrock geology is shown on Drawing 002.

Exploratory Borehole Data

- 2.6 A search of the BGS borehole database shows the nearest borehole to the site to be borehole reference SO62SE10 which is located approximately 800m north of the site. This borehole was drilled in 2008, to a depth of 51m. The logging recorded 1m of soil overlying red sandstones interbedded with red marl (clay) to the full depth of the borehole of 51m. This confirms the lithological descriptions reported by the BGS. Due to this borehole being located over the same mapped bedrock geology as the subject site, it is likely that the lithologies are similar in nature. The full borehole log is attached at Appendix A, for reference. There are no publicly available boreholes located on the site itself. Nevertheless, in the absence of site-specific borehole information, the Brownstones Formation below the subject site is categorised as an inferred resource, until proven.

Uses and Extractive History of the Safeguarded Mineral

- 2.7 The Brownstones Formation is recognised within Gloucestershire as a 'natural building stone'. It is specifically referenced in the Gloucestershire Minerals Local

¹ Scottish Geology Trust. Wilderness (Land Grove) Quarry, Gloucestershire. Available at: https://geoguide.scottishgeologytrust.org/p/gcr31/gcr31_wildernessquarry



plan and the Historic England Gloucestershire – Building Stones of England Guide². It is mostly used for historic conservation purposes and to maintain local distinctiveness across Gloucestershire. An example of the use of the Brownstones Formation is shown in the Historic England guide as roofing slates². However, it can also be used as armour stone for flood prevention works in rivers and coastal locations, due to its recognised durability.

- 2.8 The annual outputs from building stone quarries are low within Gloucestershire compared to aggregate workings, at a few thousand tonnes per annum. Natural building stone quarries are typically small and independently run on an intermittent basis, when there is a local demand for the stone.
- 2.9 Within Mitcheldean, there is already an operating quarry extracting the Brownstones Formation, the Wilderness Quarry (also known as the Land Grove Quarry) on an intermittent basis. This quarry has been operational since 1948 and was subject to a second periodic Review of Old Mineral Permissions (ROMP) (application reference: 21/0068/FDROMP) in 2021. This permission consented mineral extraction until 2042. Due to the intermittent nature of building stone extraction, this quarry is dormant at the time of writing. The Wilderness Quarry is located approximately 1 km southeast of the subject site. A range of products are produced from the quarry, such as armour stone, block stone and bulk fill material. The operator stated in the first ROMP review that whilst the stone is suitable use as a construction aggregate, the quarry is too small to be suitable for aggregates production.

3.0 Mineral Planning Policy

- 3.1 The relevant mineral planning policies are contained within the Gloucestershire Minerals Local Plan (MLP), which was adopted on 20th March 2020 and covers the

² Historic England (2023). Gloucestershire Building Stones of England. Available at: <https://historicengland.org.uk/images-books/publications/building-stones-england-gloucestershire/bse-gloucestershire/>.



period 2018 – 2032. Sections 7 – 9 ‘Mineral Safeguarding’ addresses the safeguarding of mineral resources and infrastructure.

3.2 Policy MS01 | Non-mineral developments within MSAs states:

‘Non-mineral development proposals within a Mineral Safeguarded Area (MSA) will be permitted provided: -

I. they are exempt from safeguarding requirements as set out in the list contained in table 2; or

II. needless sterilisation of mineral resources will not occur; or

III. the mineral resources of concern are not economically valuable; or

IV. it is appropriate and practicable to extract minerals prior to development taking place; or

V. the overriding need for development outweighs the desirability to safeguard mineral resources’

3.3 With regards to the requirements for Mineral Resource Assessments, Policy MS01 states under heading 121 that ‘In terms of economic viability matters, a MRA will need to look at the quantity and quality of mineral resources and their likely commercial interest...’.

3.4 Under heading 122 of the MLP, it goes on to state ‘Where there is potential for prior extraction, MRAs will need to show how feasibility issues have been carefully considered. Key issues likely to require scrutiny include: the degree to which the implementation of non-minerals development will be affected (e.g. economic viability, timescales etc...); civil engineering challenges or opportunities resulting from prior extraction; and the identification, and significance of possible environmental and amenity constraints and / or opportunities from any mineral working’.

3.5 Policies MS01 and MW02 are attached in full at Appendix B.

4.0 Compliance with Mineral Safeguarding Policy

4.1 In order to determine if the proposed development is compatible with mineral planning policy, we first need to determine if the safeguarded mineral could be suitable for working. For a mineral deposit to be considered suitable for mineral



- extraction, factors such as size, quality, environmental and commercial should be considered.
- 4.2 We have determined that there is likely to be Brownstones Formation sandstone at the site, which is locally a source of building stone and aggregate, so considered to be of sufficient quality for these end-uses.
- 4.3 The following sections of the report assess the constraints on potential extraction of the Brownstones Formation as an aggregate mineral and as a natural building stone.
- 4.4 The first constraint is the site area. At 9.72 ha, the gross site area is considered too small to be viable for aggregates production before even considering the conceptual quarry design principles. This is supported by statements contained within the first ROMP application for the nearby Wilderness Quarry, which is similar in site area (5.5 ha). The operator states, *'The percentage of reserves which could be employed for aggregate production is too small, and too high cost, to be viable for that market, nor is the quarry equipped to provide aggregates'*. If these statements are applied to the subject site, it means that it is also too small for viable aggregates production.
- 4.5 The following section addresses extraction in the context of a natural building stone product, and applies conceptual quarry design principles to the site.
- 4.6 The site is bounded on three sides by roads and developed areas. Environmentally Sensitive Receptors (ESR's) such as residential properties are located immediately off Ross Road and Carisbrook Road, and industrial receptors are located off Bradley Close Road. Amenity considerations are a significant factor to be considered for any mineral extraction operation. A typical amenity standoff would be a minimum of 100m from any built development, and a minimum of 25m from infrastructure. When this standoff has been applied, it reduces the area of mineral available. Once suitable buffers to ESR's have been applied, the residual area is considered too small for a commercial mineral extraction operation. The buffers to ESR's are illustrated on Drawing 002.
- 4.7 In reality, amenity standoffs from residential receptors would likely exceed 100m for the subject site, which would reduce the available mineral further still. This is due to the methods used to extract the Brownstones Formation. As detailed in the planning conditions in the second ROMP review for the Wilderness Quarry, the



- stone is first drilled and then subsequently blasted. It is likely that similar extraction techniques would be applicable on our site, should mineral extraction be proposed. Blasting has noise, dust and stability implications for surrounding properties. These would need to be considered during the quarry design phase, and it is likely that the required buffers to ESR's would be >100m. The area of mineral available would therefore be reduced further.
- 4.8 At Wilderness Quarry, there are strict noise control limits of <55 dB when measured at the nearest residential property. Wilderness Quarry is located more than 300m away from the closest ESR, which is off Gloucester Road. It is surrounded and therefore screened by woodland to the north, east and west.
- 4.9 Once conceptual quarry design principles have been applied to the site, the residual area for any mineral extraction operation is considered too small to be economically viable for either aggregate or building stone production. In some cases prior extraction of mineral can be an option for a site where non-mineral development is proposed in an area safeguarded for minerals, however this is not considered further here due to the size constraints identified above.
- 4.10 Notwithstanding the pre-existing indirect sterilisation of most of the potential resource and amenity constraints, another factor to consider is the timescales involved with extraction.
- 4.11 The first ROMP application for the Wilderness Quarry, application reference: 97/5007/FDROMP, stated that the quarry had been granted permission on 16th July 1948, indicating that it has been operational for nearly 80 years, at the time of writing.
- 4.12 As natural building stones such as the Brownstones Formation are extracted on an intermittent basis, annual outputs vary significantly. In the first ROMP review for the Wilderness Quarry (dated 1997), the operator estimated gross reserves to be approximately 1.6 million tonnes. Due to the variable output rates, the operator stated that estimated life of the quarry varied between 16 – 231 years. However, they then went on to state *'It is most realistic to assess the life of the quarry on the dimension stone sales, which are unlikely to exceed much more than 1000 t / a on average. If 10% of the total reserve is of dimension stone, then the life is 160 years.'*



The reserve life therefore likely to extend beyond 2042 and the proposed new planning conditions reflect this’.

- 4.13 The following conclusions can be drawn from the statement above: 1) prior extraction at the subject site would occur over unacceptable timescales and 2) reserves of the Brownstones Formation at the Wilderness Quarry are sufficient to meet the demand for this building stone. The latter conclusion is also relevant in the context of *Policy MW02 | Natural building stone*, which states:

Mineral development proposals for natural building stone working will be permitted, where it can be demonstrated: -

I - there are no alternative suitable supplies available to meet demand that are viable and represent a more sustainable source.

As evidenced from the Wilderness Quarry ROMP documentation, this quarry can sustainably meet local demand, so a planning application for prior extraction on the subject site is unlikely to be successful.

- 4.14 Overall, from an aggregate extraction perspective, the site is considered to be too small to be economically viable as a stand-alone operation. For use as a building stone, the assessment concludes that the proximity to surrounding environmental sensitive receptors reduces the workable area to such an extent that the residual potential mineral would be too small to be commercially viable. The proposed development is therefore compatible with mineral safeguarding policy MS01 point three where *‘the mineral resources of concern are not economically valuable’*.

5.0 Conclusion

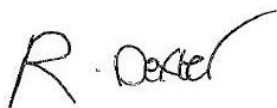
- 5.1 The site is located in an MSA and an MCA for Sandstone and Limestone mineral resources. The safeguarded mineral is the Brownstones Formation, which comprises sandstones interbedded with marls. The geology underlying the site has been assessed using BGS mapping, BGS borehole records and local outcrops at the nearby Wilderness Quarry, which extracts the same mineral on an intermittent basis.
- 5.2 The safeguarded mineral is recognised within Gloucestershire as a source of natural building stone. However, the durable properties of the mineral means that it is also suitable as a construction aggregate. Local Mineral Planning Policy states



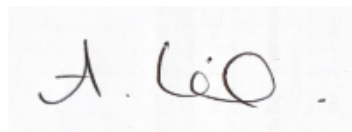
that non-mineral development within an MSA will be permitted if it can be shown that one or more of the exemption criteria under policy MS01 are applicable. Our report assesses the extraction of the Brownstones Formation for use as an aggregate and a natural building stone.

- 5.3 Overall, from an aggregate extraction perspective, the site is considered to be too small to be economically viable as a stand-alone operation. For use as a building stone, the assessment concludes that the proximity to surrounding environmental sensitive receptors reduces the workable area to such an extent that the residual potential mineral would be too small to be commercially viable. The proposed development is therefore compatible with mineral safeguarding policy MS01 point three where *'the mineral resources of concern are not economically valuable'*.
- 5.4 Additionally, natural building stone extraction from the nearby Wilderness Quarry occurs on an intermittent basis and demand for this stone will likely be met from this quarry beyond 2042. Therefore, an application for prior extraction for natural building stone would not be able to satisfy the demand requirement under *Policy MW02*.

SLR Consulting Limited



Rhys Dexter
Mineral Surveyor –
Mineral Estates Management

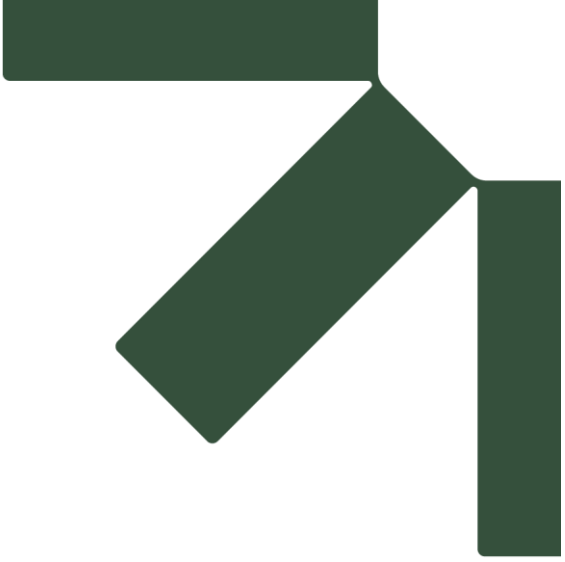


Amabel Laurie
Associate Director –
Mineral Estates Management



Neil Hughes
Technical Director –
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Appendix A BGS borehole SO62SE10

Land North of Carisbrook Road, Mitcheldean

Mineral Resource Assessment

Gladman Developments Ltd

SLR Project No.: 439.061524.00001

16 March 2026



AC ~ 47534

ENVIRONMENT AGENCY

Form WR - 381	Ref: formwr381	Agency No.
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BOREHOLE RECORD

MIDLANDS EA

A. SITE DETAILS

216

SO62/27
SO62SE1

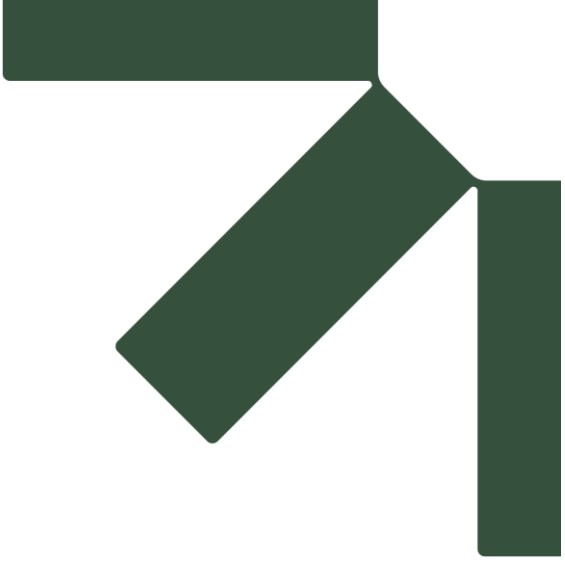
Borehole drilled for:	Mr C Whitehouse
Location:	Bradley Farm, Bradley Court Green, Mitcheldean, Gloucs GL17 0DR
N.G.R.:	SO 667 203
Ground Level (if known):	SURFACE
Drilling Company:	W.B. & A.D. MORGAN LTD., PRESTEIGNE, POWYS. LD8 2UF
Date of Drilling:	Commenced: 02/04/08 Completed: 03/04/08

B. CONSTRUCTION DETAILS

Borehole datum (if not ground level) <u>GROUNDLEVEL</u>	
(Point from which all measurements of depth are taken e.g. flange, edge of chamber, etc.)	
Borehole drilled diameter.....	200 mm from 0 to 51 m/depth
	mm from to m/depth
	mm from to m/depth
Casing material: u.P.V.C diameter 103 mm from 0 to 51 m/depth and type (e.g. plain steel, plastic slotted)	
Plain diameter 103 mm from 0 to 22 m/depth	
Slotted diameter 103 mm from 22 to 46 m/depth	
Plain diameter 103 mm from 46 to 51 m/depth	
Slotted diameter mm from to m/depth	
Plain diameter mm from to m/depth	
Grouting details:	Pump 14m to surface
Water struck at:	3m,6m,34m m (depth below datum - mbd)
Rest water level on completion:	ARTESIAN m (depth below datum - mbd)
Estimated blowout yield:	2,000 Gallons per hour

C. STRATA LOG

Description of Strata	Thickness (m)	Depth (m)
Red sandy subsoil	1	1
Soft red sandstone	1	2
Fractured red sandstone	1	3
Medium red sandstone	5	8
Medium red marl	2	10
Soft red marl	1	11
Red sandstone / red marl bands	14	25
Red marl	1	26
Red/ grey sandstone with red marl bands	25	51
Other Comments (e.g. gas encountered, saline water intercepted, etc.)	ARTESIAN	
Gravel Pack Quantity:	1,750kg	Temp Steel Casing: Depth and Diameter
Cement:	625kg	3.5m x 250mm
Rig & Crew:	Halco V666, D Morris, J Scott	



Appendix B Gloucestershire MLP Policies MS01 and MW02

Land North of Carisbrook Road, Mitcheldean

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Policy MS01 | Non-mineral developments within MSAs

Non-mineral development proposals within a Mineral Safeguarded Area (MSA) will be permitted provided: -

- I. they are exempt from safeguarding requirements as set out in the list contained in table 2; or
- II. needless sterilisation of mineral resources will not occur; or
- III. the mineral resources of concern are not economically valuable; or
- IV. it is appropriate and practicable to extract minerals prior to development taking place; or
- V. the overriding need for development outweighs the desirability to safeguard mineral resources.

Contributes to the delivery of plan objective 

Interpretation and implementation

112. Safeguarding mineral resources in Gloucestershire will require collaboration between the County Council as the Mineral Planning Authority, the borough, city and district local planning authorities that make up the county and those of neighbouring areas where relevant. To facilitate effective implementation, appropriate and timely consultation between key parties must be carried out. This should happen during the plan making stage and must occur when considering non-minerals development proposals.
113. Delineating Mineral Consultation Areas (MCAs) presents a statutory consultation mechanism that can be used in Gloucestershire. It is designed to ensure that mineral resource safeguarding is appropriately taken into account through the planning system in two-tier areas⁵⁶.

⁵⁶ The Town & Country Planning Act 1990, Schedule 1, Paragraph 7, Sub paragraph 4 and 7 details consultation requirements in two-tier areas where (following notification) development is likely to affect or be affected by mineral working.

114. MCAs cover the full extent of Gloucestershire's MSAs and have been included on the plan's Policies Map.
115. Where non-mineral development proposals are located wholly or partially within a Gloucestershire MCA the local planning authority for that area is required to notify the County Council as the Mineral Planning Authority and afford them the opportunity to comment on possible mineral safeguarding matters before any decision is made to grant or refuse permission.
116. Non-mineral development proposals that pose a potential risk of needlessly sterilising mineral resources will need to be carefully scrutinised to determine whether it is significant enough to justify a recommendation to restrict or prevent development taking place.
117. Applicants of non-mineral development proposals within MSAs should consider engaging with the issue of mineral resource safeguarding at the earliest possible opportunity. Obtaining pre-application advice is strongly encouraged.
118. However, certain types of non-mineral development are, on balance, likely to have a negligible effect on the sterilisation of mineral resources. Table 2 below sets out the circumstances when this will apply. All types of non-mineral development outlined in table 2 satisfy clause 1 of policy MS01 and therefore do not need to undergo a minerals-related consultation with the County Council. In determining the acceptability in planning terms of these types of development, it would be unreasonable due to the nature of the proposal to give weight to mineral resource safeguarding matters.

Table 2 | List of non-mineral development types for which no mineral resource assessment will be required

Non-mineral development types

- All householder developments;
- All minor development including fences, boundary walls, bus shelters;
- Alterations and / or extensions to an existing non-residential building, unless intensified use is also proposed;
- Change of use of an existing building, unless intensified use is also proposed;
- Signage requiring advertisement consent;
- Agricultural, forestry and telecommunications development requiring

prior notification;

- Works to trees;
- Changes to a Listed Building and demolitions in a Conservation Area requiring consent;
- Development requiring a Certificate of Lawfulness of Existing Use;
- Development requiring a Certificate of Lawfulness of Proposed Use or Development;
- All temporary development;
- All development dealt with under reserved matters unless the Mineral Planning Authority has specifically requested notification at the outline approval stage;
- All development that would accord with emerging and adopted local development plans* by way of their inclusion within a plan allocation following previous consultation with the Mineral Planning Authority and the satisfactory resolution of possible mineral resource safeguarding matters identified at that time; and
- All development considered under the 'Permission in Principle' consent route unless the Mineral Planning Authority (MPA) specifically requests that a Mineral Resource Assessment is included on the local Brownfield Land Register entry or a 'Permission in Principle' decision notice.

* This also Includes any allocation contained within a Neighbourhood Plan.

119. For all non-mineral development proposals that need to be assessed against clauses 2 to 4 of policy MS01, a Mineral Resource Assessment (MRA) should be prepared.

120. The MRA must meet PERC Reporting Standards⁵⁷. It must determine the category of mineral resources that are present (i.e. 'Inferred', 'Indicated' or 'Measured') and carefully analyse site-specific circumstances to determine whether there will be a risk of sterilisation from proposed non-minerals development. In making a judgement, careful consideration will be given to technical details concerning the extent to which non-minerals development may affect access to currently worked minerals and / or unworked, but potentially exploitable, resources on the application site and / or nearby,

⁵⁷ PERC refers to Pan-European Reserves and Resources Reporting Committee Standard of Exploration, Results and Mineral Resources - <http://www.percstandard.eu>

within the sphere of influence of the proposal. The risk of unreasonably curtailing / constraining permitted mineral working activities should also be investigated.

121. In terms of economic viability matters, a MRA will need to look at the quantity and quality of mineral resources and their likely commercial interest. This may require a review of previously collated and published geological information, the undertaking of borehole investigations and seismic surveys. Regard will also need to be given to the specification requirements of minerals to meet intended uses including the ability to fulfil BSI standards or equivalent (with or without processing). Evidence of marketing to operators to work resources, potential operational factors and costs, and a review of the proximity to markets with associated transport costs should also form part of the assessment.
122. Where there is potential for prior extraction, MRAs will need to show how feasibility issues have been carefully considered. Key issues likely to require scrutiny include: - the degree to which the implementation of non-minerals development will be affected (e.g. economic viability, timescales etc...); civil engineering challenges or opportunities resulting from prior extraction; and the identification, and significance of possible environmental and amenity constraints and / or opportunities from any mineral working.
123. Ordinarily the prior extraction of minerals should be dealt with as a stand alone planning proposal determined by the Mineral Planning Authority. However, it may be possible to deal with the matter as part of a non-mineral development proposal. This can only be decided on a case-by-case basis, although will be influenced by the nature of the planning proposal (e.g. full or outline application) and the size, scale and expected timeframe for prior extraction.
124. Nevertheless, irrespective of how applications for prior extraction of minerals are handled, primary consideration will be given to the relevant adopted mineral planning policies that form part of the local development plan and which are in force at the time.
125. Overriding need for non-mineral development, which is contained under clause 5 of policy MS01, will be for the local planning authority to determine. However, any decision to override the safeguarding of mineral resources should only be taken having had access to sufficiently detailed supporting information, which should normally include a MRA.

supply of natural building stone with marked differences occurring often even within individual quarry units. Working can be intermittent with demand and subsequent market value for different types of stone subject to considerable uncertainty and volatility.

167. In addition there are a number of mineral workings supplying natural building stone that are also capable of supplying aggregates and other mineral products such as agricultural lime and for industrial uses. For reasons of effective site management and in certain circumstances, economic viability⁷⁸, it has been allowable for these other types of mineral developments to occur in parallel where demonstrably justified. Nevertheless, very strict controls are needed to manage multi-mineral workings originally founded on their ability to supply natural building stone. This is to avoid unbalancing the acceptability of such sites due to overly intensified development. The heightened risk of generating unacceptable adverse impacts on the environment and local communities, and / or degrading the quality of valued landscapes and / or the setting of historic built assets must be prevented.

Policy MW02 | Natural building stone

Mineral development proposals for natural building stone working will be permitted, where it can be demonstrated: -

- I. there are no alternative suitable supplies available to meet demand that are viable and represent a more sustainable source;
- II. a positive contribution will be made to the ability to maintain historic built assets and achieve high quality design and local distinctiveness or its reinforcement within new development;
- III. a positive contribution will be made to sustaining or growing the local economy and upholding the cultural heritage of the Cotswolds or Forest of Dean; and
- IV. the requirements of policy MR01 (Restoration, aftercare and facilitating beneficial after-uses) can be satisfactorily met.

Contributes to the delivery of plan objectives



⁷⁸ Whilst acknowledging that the unit price for building stone is higher than other quarry products, it is recognised that it can often have a higher production cost.

Interpretation and implementation

168. Natural Building stone is the collective term used to describe naturally-occurring construction materials used as a walling stone, roofing slate, dimension stone or stone for ashlar, rubble masonry, quoins, lintels, and other architectural masonry. It excludes however, manufacturing to produce ‘reconstituted’ or ‘artificial’ stone⁷⁹. All mineral development proposals that involve the working of natural building stone must be considered against policy MW02. Although, scrutiny of policy MW06 may be necessary where on-site processing of quarried stone is also planned. This could involve mechanical sawing, planning, and turning on a lathe or hand working to match architectural design requirements or stone splitting.
169. For multi-mineral development proposals that could involve the working of some aggregates and other minerals along with natural building stone, the relevant requirements of policies MW01 and MA02 will also need careful examination.
170. Policy MW02 supports national policy in facilitating mineral development proposals that will make a contribution towards meeting demand for natural building stone, whilst taking into consideration the need to protect designated sites⁸⁰. A robust justification for allowing future natural building stone working in Gloucestershire must be shown. This is as a result of the widespread coverage and importance of the county’s protected designated sites and clear geographical relationship between these sites and areas of natural building stone resource.
171. All proposals for natural building working will need to be accompanied by a sufficiently detailed Building Stone Assessment (BSA). This must set out what the forecast demand is for the natural building stone types under consideration, backed by robust and credible evidence. The Strategic Stone Study may prove a useful resource to use⁸¹. Demonstrating clear links between the natural building stone types under consideration and the maintenance of particular heritage assets and / or local vernacular architecture may also be extremely advantageous. The BSA will need to provide a comprehensive analysis of current supplies and an explanation as to why these are likely to be insufficient and / or inappropriate to meet the forecast demand. An appreciation of the environmental and economic attributes of alternative supplies will be vital, particularly when attempting to consider their comparative disadvantage to the proposed minerals development.

⁷⁹ The position regarding the manufacturing of ‘reconstituted’ or ‘artificial’ stone is founded on the advice contained in the DCLG / BGS Mineral Planning Fact Sheet – Building and Roofing Stone, obtainable at: - <https://www.bgs.ac.uk/mineralsuk/planning/mineralPlanningFactsheets.html>. The manufacturing of building materials is categorised as a B2 (General Industrial) land use.

⁸⁰ National Planning Policy Framework (NPPF) (2012), section 13, paragraph 144, bullet point 8

⁸¹ The Historic England / DCLG / BGS Strategic Stone Study Online is accessible at: - <http://mapapps.bgs.ac.uk/buildingStone/BuildingStone.html>

172. In carrying out an assessment of sustainability, a review of the potential impacts on key designations will be required. Attention must be given to key designations present in the locality such as the valued landscapes of the Cotswolds and Wye Valley AONBs. The scale and significance of any impacts on the conservation of the landscape and scenic beauty, and ability to protect wildlife and cultural heritage will be of paramount importance. Meeting the relevant criteria set out in policies DM06, DM08 and DM09 and MR01 will be crucial. However, as supported by national policy, a degree of flexibility may be shown when analysing individual proposals for small-scale natural building stone working. Subject to the merits of any given proposal and consideration of possible environmental impacts, on a case by case basis it may be justified for proposals to involve relatively low rates of extraction, periods of intermittent working and as a consequence, relatively longer planning permission timeframes than would otherwise be desirable⁸².
173. Favourable consideration may also be given to evidence that shows greenhouse gas emissions from transport will not increase as a result of using local natural building stones rather than relying upon imports from a greater distance⁸³. Although the suitability of the local road network to support such proposals must be factored into this analysis. The relevant criteria of policy DM03 will be applicable.
174. Natural building stone working positively contributes to the economic well-being and cultural heritage of the county's rural local communities. It does so directly through local employment opportunities, and indirectly by contributing to the localities attractiveness as an area for tourism, recreation and other businesses. Support for new or sustained local skilled labour, particularly traditional quarrying-related skills will be a noteworthy benefit with mineral development proposals for the working of building stone. Appropriate provision for local apprenticeships secured either by way of a planning condition or a planning obligation could also prove to be materially significant in the decision making process⁸⁴. However, in accordance with the 'agent of change' planning principle, proposals for new or extended natural building stone working that could have a significant adverse effect on the operation of other existing established businesses will need to provide suitable mitigation measures⁸⁵. This will ensure the broader local economy is not unduly weakened or suffers from a net decline as a consequence of new mineral developments. In assessing 'agent of change' impacts, consideration will be given to the temporary nature of mineral working, that

⁸² National Planning Policy Framework (NPPF) 2012, section 13, paragraph 144, bullet point 8

⁸³ Greenhouse gas emissions from transport include Total greenhouse gas emissions from transport, including carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), are analysed in this indicator. Emissions are split into road transport, railways, domestic navigation, domestic aviation, international aviation and maritime transport.

⁸⁴ Traditional quarrying-related skills such as stone cutting and stone masonry may be applicable.

⁸⁵ National Planning Policy Framework (NPPF) 2019, paragraph 182

some adverse impacts are unavoidable and there may be a lack of alternative options given minerals can only be worked where they are found. Advice should be sought from the MPA at the earliest possible opportunity and ideally at the early pre-application stage, to establish whether matters relating to the 'agent of change' are relevant or to what extent they will need to be addressed.

Drawings

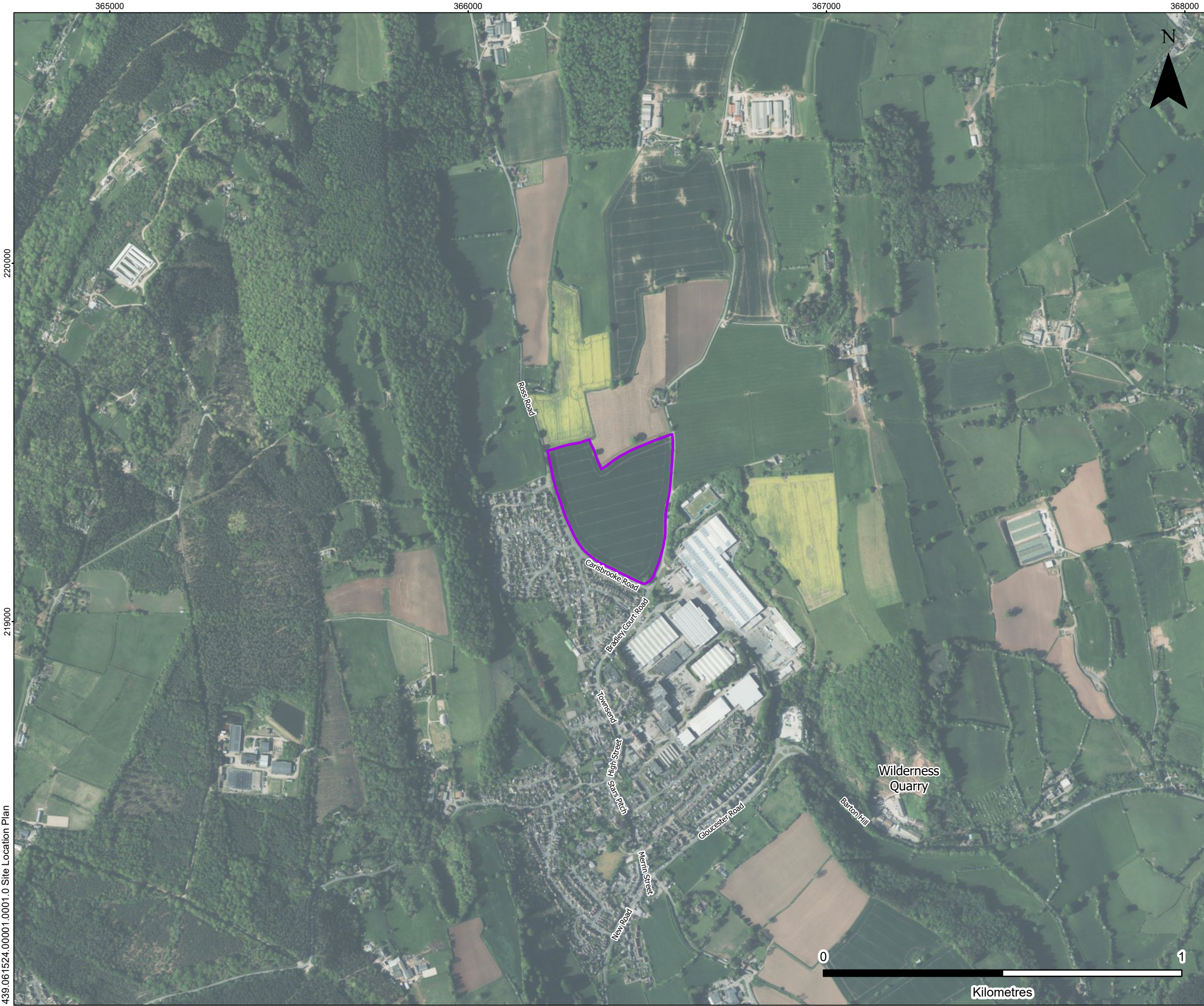
001 Site Location Plan

002 Bedrock Geology with Site Constraints

Scale

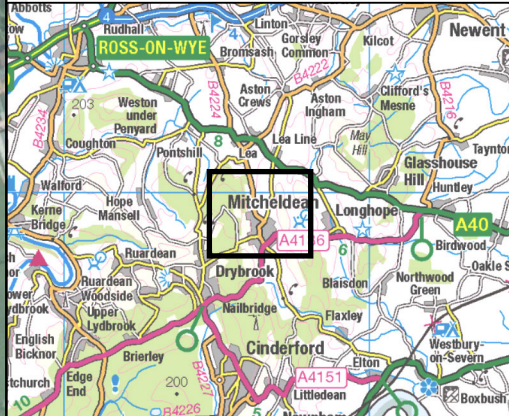
1:10,000

1:10,000



LEGEND

 Study Area







LAND NORTH OF CARISBROOK ROAD

MINERAL RESOURCE ASSESSMENT

SITE LOCATION PLAN

FIGURE 01

Scale1:10,000 @ A3

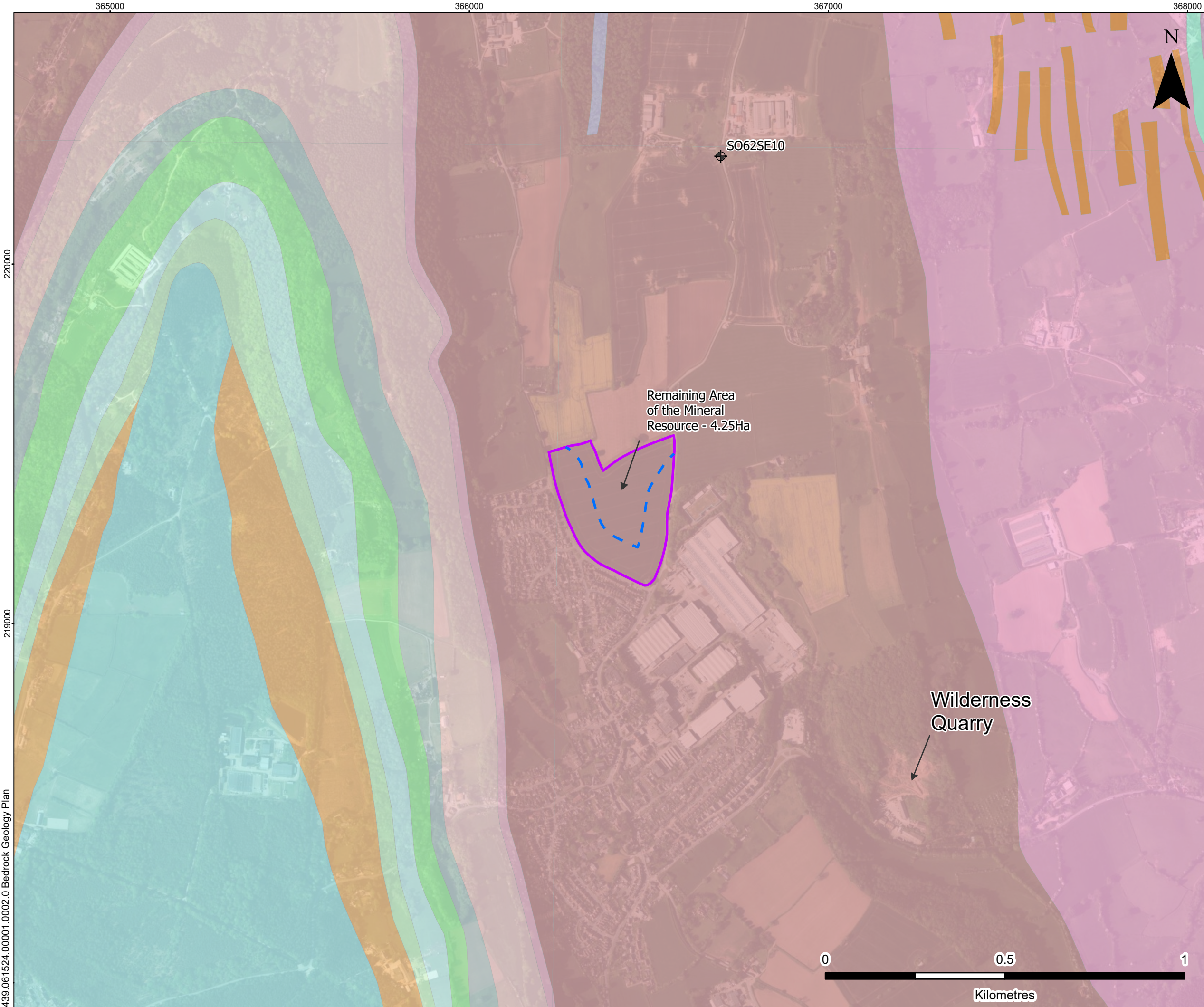
DateMARCH 2026

365000 366000 367000 368000

220000

219000

439.061524.00001.0001.0 Site Location Plan



LEGEND

Study Area

BGS Borehole (SO62SE10)

100 m Buffer line from Environmentally Sensitive Receptors

Linear Geology

Coal seam, inferred

Bedrock Geology

Avon Group - Mudstone And Limestone, Interbedded

Black Rock Limestone Subgroup - Dolostone

Cromhall Sandstone Formation - Sandstone

Gully Oolite Formation - Limestone, Ooidal

Llanelly Formation - Limestone And Argillaceous Rocks, Interbedded

Trenchard Formation - Mudstone And Sandstone

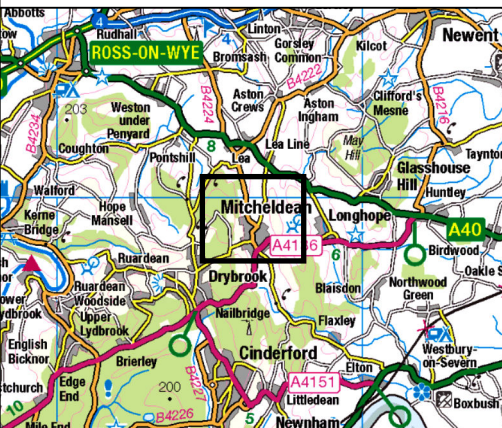
Tintern Sandstone Formation - Sandstone

Brownstones Formation - Sandstone And Argillaceous Rocks, Interbedded

Quartz Conglomerate Formation (forest Of Dean) - Sandstone And Conglomerate, Interbedded

St Maughans Formation - Argillaceous Rocks And Sandstone, Interbedded

St Maughans Formation - Sandstone



LAND NORTH OF CARISBROOK ROAD
MINERAL RESOURCE ASSESSMENT
BEDROCK GEOLOGY

FIGURE 02

Scale 1:10,000 @ A3 Date MARCH 2026

439.061524.00001.0002.0 Bedrock Geology Plan



Making Sustainability Happen